# **BRUM BREATHES**

Birmingham's journey to clean air

#BrumBreathes

2022

Pre-Publication Version pending final design

INSERTS x3 (see separate document)

Source of Pollution – Health Impacts

Source – Solution (future)

Your views – comments with answers.

### **Clean Air Strategy - Actions**

Actions speak louder than words. Listed below are the actions we will pursue to improve air quality over the next 12 months and beyond. The list is by no means exhaustive, it is only constrained by the available resources and what we need to focus upon and complete first. This Clean Air Strategy will complement our existing Air Quality Action Plan and focus of our actions, which will include targeted actions in areas that have the most pressing need to improve air quality. These are usually areas of congested traffic with houses in close proximity to the road for which there is no escape from the worst effects of air pollution.

Highlighted in blue are the actions we can committee resources to – once an action is completed or additional resources become available, we will be able to expand our focus. Regular updates on the progress of these actions will be publicised via <a href="https://www.BrumBreathes.co.uk">www.BrumBreathes.co.uk</a>

The list of actions will be reviewed and updated every 12 months. Ideas for actions will be sought across all departments at Birmingham City Council and external stakeholders. We also want to hear from you, if you have an idea for an action on air quality, please feel free to share it via <a href="www.Birminghambeheard.org.uk/Action On Air Quality">www.Birminghambeheard.org.uk/Action On Air Quality</a> all ideas will be considered for future updates of the Clean Air Strategy.

- 1. Clean Air Zone see <u>www.BrumBreathes.co.uk</u> for further details.
- 2. Clear accessible data including air quality and traffic will be made accessible via online interactive dashboards. (current air quality data is available at <a href="https://www.birminghamairquality.co.uk">www.birminghamairquality.co.uk</a>).
- 3. Increased air quality monitoring, in the form of additional automatic stations, indicative sensors and diffusion tubes will be deployed across the city.
- 4. Enhanced air quality monitoring around Birmingham schools supported by an educational resource package.
- 5. Joining the Non-Road Mobile Machinery (NRMM) programme to help reduce emissions from construction sites (and similar).
- 6. Anti idling campaign
- 7. Increase awareness of the impact of wood burners, fireworks and bonfires.

### Forward from the cabinet member



Poor air quality contributes to thousands of early deaths and worsening of a range of health conditions, disproportionately impacting people living in deprivation, the very young and the old.

The health impacts include bronchitis, asthma, kidney disease, diabetes, dementia, and stunted lung development in children, the list goes on.

In Birmingham road traffic emissions are the dominant source of air pollution. Other sources of air pollution include biomass boilers, firework displays, diesel generators, demolition and construction, bonfires, wood burners, industrial emissions, to list but a few.

Significant progress has already been made by supporting improvements to the public transport system across the city and wider region. These include the extension of the Metro network, reallocating road space to buses, supporting the adoption of more environmentally friendly fuels such as hydrogen and significant expansion of the Electric Vehicle (EV) charging network. However, much more needs to be done to improve the city's air quality.

By understanding the sources of air pollution, along with the health, legal and financial consequences, we can set out priorities and take practical steps in the form of pledges that will guide the city towards cleaner, greener growth and clean air. Finally, focused targeted actions will be pursued as quickly as possible. These actions are critical to ensure the aim of the strategy can be fulfilled. If you have any new ideas for an action on air quality, please feel free to share the via <a href="www.Birminghambeheard.org.uk/Action">www.Birminghambeheard.org.uk/Action</a> on Air <a href="Quality">Quality</a> your ideas will be taken forward in future updates of the Clean Air Strategy.

Most importantly this is a Clean Air Strategy that builds on the benefits to be gained from the introduction of a <u>Clean Air Zone (CAZ)</u> and sets out a framework for future priority setting and decision making. It will be informed by the outputs of the Air Quality Action Plan (AQAP) revision<sup>1</sup>, so that future initiatives are evidence based.

Taking action to improve air quality also benefits the Route to Zero Programme<sup>2</sup> that will enable the changes required to near carbon neutral in 2030. Transport is a big contributor to carbon emissions, housing is a far bigger, more expensive challenge but not for this document. By working together and supporting the change, our vision for a cleaner, greener Birmingham has a stronger chance of becoming a reality.

<sup>&</sup>lt;sup>1</sup> http://62.65.40.208/birmingham//Reports/2021\_Birmingham\_City\_Council\_Air\_Quality\_Action\_Plan\_2021.pdf

<sup>&</sup>lt;sup>2</sup> https://www.birmingham.gov.uk/info/20015/environment/2026/climate\_emergency

### Introduction

Imagine a city where air pollution is a thing of the past. Cars no longer dominate our city with more people choosing to walk and cycle (especially for shorter journeys) and there is a world class integrated public transport network that can get you where you want to go, quickly and efficiently. Air pollution from biomass boilers, firework displays, diesel generators, demolition and construction, bonfires, wood burners, and industrial emissions no longer damages our health and the environment. Our homes are well insulated. Our energy needs are met by low carbon, low pollution, renewable energy sources<sup>3</sup>. Waste is minimal and recycling is commonplace.

In the post Covid-19 world, there is now a unique opportunity to link the economic recovery to a greener, cleaner way of living, changing the fabric of the city for good.

This 'clean growth' means growing our economy whilst tackling air pollution, protecting the natural environment, and cutting greenhouse gas emissions, future proofing our city as we look ahead to a better future for all of us and generations to come. In this Strategy we present one simple aim:

Make a positive difference for everyone who lives and works in Birmingham by tackling the causes of poor air quality.

#### **Your Views**

In 2019 the Council ran a public consultation on a draft Clean Air Strategy. Your feedback made it clear that you wanted an improvement in air quality. You want a strategy that is accessible and clearly sets out the challenges and opportunities for improvements. You also wanted the Council to say what it would do and what others would need to do to realise the goal of cleaner air.



<sup>&</sup>lt;sup>3</sup> https://www.birmingham.gov.uk/info/20015/environment/2026/climate emergency

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From the consultation the key messages were clear, and we have acted upon them -

- You wanted to see a stronger link between air quality and transport policies and improvements. We have brought together planning and highways policies in one Pledge Planning for the Future - to show how better design can lead to improved air quality.
- You wanted more information about the forth coming Clean Air Zone and clarity on where
  the revenue would be spent. We have answered your concerns in the <u>Pledge Implementing</u>
  <u>a Clean Air Zone</u> which provides more detail and sign posting to the relevant information.
- You want to make sure the most vulnerable and less able amongst us are not forgotten in the changes that we need to implement. We have introduced a new <u>Pledge Inclusivity and</u> <u>Protecting the Vulnerable to ensure this voice is clearly heard.</u>
- You wanted our pledge focused on schools to be stronger. We have strengthened our pledge on schools to reflect your views and ideas.

Taking on board your views we have adapted the strategy to make it as accessible and adaptable as possible. The strategy is now formed of four sections:

- 1- **Understand** the problem, explaining the dominant types and sources of air pollution, the health impacts, the financial impacts and the legal context.
- 2- **Priorities** that are focused on the dominant sources of air pollution and limit our exposure. These priorities will be used to guide decision making in the short, medium and long term.
- 3- **Pledge** based on what an organisation can contribute to improving air quality. Whilst this strategy has been produced by Birmingham City Council, it is hoped that other organisations will be able to contribute additional pledges. This will clearly demonstrate how we, as city, intend to change for the greater good.
- 4- **Action** on focused goals that will be worked upon as quickly as possible. Once an action is completed a new action will be added. We are keen to hear new ideas, please feel free to share them via <a href="www.Birminghambeheard.org.uk/Action">www.Birminghambeheard.org.uk/Action</a> on Air Quality your ideas will be take forward in future updates of this Clean Air Strategy.

By working together, we can improve the air we breathe. The Council has made the first pledges, the next steps will need your support. Ask yourself, how can you, your community, your business, your organisation contribute to the vision of a cleaner, greener Birmingham? And what pledges can you make or contribute towards?

### 1 – UNDERSTAND

### What is air pollution & Where does it come from?

The World Health Organisation (WHO) defines air pollution as

"Substances put into the air by the activity of mankind in concentrations sufficient to cause harmful effects to health, property, crop yield or to interfere with the enjoyment of property"

There are many substances that make up air pollution, however for Birmingham those currently of concern are:

**Nitrogen Dioxide** – is a gas that comes from the burning of fossil fuels. In urban areas such as Birmingham levels of Nitrogen Dioxide can be 10 times higher compared to areas with the 'cleanest' air in the UK. The dominant source is road traffic emissions, making up two thirds (66%) of all the pollution in our air<sup>4</sup>. Other significant sources include factory emissions, gas boilers, wood burners, biomass burners, bonfires, construction plant and diesel generators.

Particulate Matter – covers numerous substances that are basically tiny bits of dust so small you cannot see them. There are several subgroups of Particulate Matter each denoted by the letters PM followed by a number e.g.  $PM_{10}$ . The number refers to the aerodynamic diameter of the particle size in microns ( $\mu$ ), where a micron is one millionth of a metre. The smaller the number, the smaller the particle size and the deeper into the lungs it can get. The dominant source of Particulate Matter comes from domestic solid fuel burning. Other significant sources include road traffic emissions, tyre wear, brake pads, diesel generators, bonfires, factory emissions, demolition and construction, road salting and fireworks. It can also come from natural sources such as Saharan sands.

#### What are the health impacts?

When air pollutants enter the body, they can have effects on various organs and systems, and they have a number of short-term and long-term effects:

- Short-term effects: exacerbation of asthma, exacerbation of COPD, cough, wheezing and shortness of breath, increased admissions to hospital and mortality.
- Long-term effects: Stroke, lung cancer, respiratory conditions, cardiovascular disease and reduced life expectancy

New evidence also suggests that air pollution may affect the brain and may be linked to dementia and cognitive decline and may be associated with low birth weight and Type 2 diabetes.

<sup>&</sup>lt;sup>4</sup> The Clean Air Zone study suggested that in 2016 road traffic accounted for 66% of nitrogen oxide emissions at key sites.

Air pollution can affect everyone at every stage of life, including the gestation period before babies are born. When air pollution has impacts in early life these effects can have lifelong impacts and impacts that may not be obvious until decades later.

Those with pre-existing respiratory and heart conditions, the elderly and children are particularly vulnerable. Individuals from socially and economically disadvantaged backgrounds are more likely to be exposed to higher levels of air pollution and suffer from the associated health impacts, in addition to other existing health inequalities that these communities often experience. This means that some groups in the population experience increased negative health impacts than others.

Small changes can make a big difference – just a  $1\mu g/m^3$  reduction in PM<sub>2.5</sub> concentrations this year could prevent 50,000 new cases of coronary heart disease and 9,000 new cases of asthma nationwide.

There is early emerging evidence of an association between air quality and COVID-19 spread / susceptibility<sup>5</sup>.

The World Health Organisation (WHO) advises that no level of air pollution is safe, although laws often define levels of air pollution that should not be exceeded. This means that even air pollutants at levels just below the legal level are still having negative impacts on health. Some air pollutants are unavoidable, but because there is no safe level it is important to reduce man-made air pollutants as far as possible. There are negative health effects of gaseous and particulate air pollutants so all should be considered to maximise improved health.

#### What are the Financial Implications?

Air pollution impacts our health, and this has financial implications for our health service and to the economy through the loss of working ability. A report in 2019 by Kings College London<sup>6</sup> commissioned by UK100 on the financial impact of air pollution for the Birmingham area calculated the burden as being between £190 - £470 million on average per year.

The costs to society from poor air quality are borne across all sectors. With the increasing focus on the NHS in the current Covid19 impacted world it is concerning to note that the total cost to the NHS and social care through to 2025 arising from air pollution is estimated to be £60.8 million for nitrogen dioxide (NO2) and £1.5 billion for fine particulate matter (PM2.5). These figures rise to £2.7 billion and £2.8 billion respectively when diseases with less robust evidence are included $^7$ .

<sup>&</sup>lt;sup>5</sup> https://www.ons.gov.uk/releases/airpollutionandcovid19mortalityrates

 $<sup>^{6}\,\</sup>underline{\text{https://www.uk100.org/wp-content/uploads/2019/05/KCL-UK100-Birmingham-City-Health-and-Economic-Impact-2019.pdf}$ 

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/708855/Estimation\_of\_costs\_to\_the\_NHS and social care due to the health impacts of air pollution - summary report.pdf

### What does the Law say?

A pragmatic approach has been taken in setting air quality standards / objectives which have been written into UK law<sup>8</sup>.

Under UK law, all Local Authorities are responsible for monitoring air quality<sup>9</sup>. Where the air quality is found to be in breach of the legal limits an Air Quality Management Area (AQMA) must be declared and the Local Authority produce an Air Quality Action Plan that sets out the measures that the authority seeks to implement to improve air quality to the point of compliance.

In the early 2000's Birmingham declared an AQMA for Nitrogen Dioxide (NO<sub>2</sub>), followed by an Air Quality Action Plan (2006 and revised in 2011). The air quality action plan has now been updated in 2021<sup>10</sup>.

There is also a national assessment undertaken by Government using a computer model called the Pollution Climate Mapping (PCM Model). This assessment has identified Birmingham city centre as a hot spot of air pollution. Being identified means Birmingham must take action to reduce air pollution in the shortest possible time and this has led to the introduction of the Clean Air Zone.

<sup>&</sup>lt;sup>8</sup> https://uk-air.defra.gov.uk/assets/documents/Air Quality Objectives Update.pdf

<sup>&</sup>lt;sup>9</sup> http://www.legislation.gov.uk/ukpga/1995/25/contents

<sup>&</sup>lt;sup>10</sup> https://www.birmingham.gov.uk/downloads/download/4061/birmingham\_city\_council\_air\_quality\_action\_plan\_2021-2026

### 2 - PRIORITIES

Road traffic emissions are the dominant source of pollution in Birmingham (as discussed in section 1). Knowing this, the following priorities have been developed to challenge our thinking and decision making<sup>11</sup>. Rather than choosing a single priority that reinforces our current thinking, it is important to view these priorities as a whole. With every decision it may not be possible to provide a benefit to every priority. A balanced view should be taken to ensure the overall aim of the strategy (to improve air quality) is not compromised.

- 1. Improve the Fleet<sup>12</sup>: Discouraging the most polluting vehicles (private and public) from our city will lead to an overall reduction in air pollution. How can we support this change?
- 2. Improve the Flow: Smoother and faster journeys that help reduce congestion will help reduce emissions [this applies to active travel routes, public transport as well as private vehicles]. Traffic congestion creates a bubble of air pollution with idling vehicles wasting fuel, wasting money and generating unnecessary carbon emission. How can we improve the flow of journeys?
- **3. Reduce the Volume:** Fewer vehicles = less pollution. By moving from private car use to walking, cycling, public transport or working from home can all reduce the number of vehicles on our streets. *How can we support this change?*
- 4. Reduce Sources & Exposure: By reducing the sources of air pollution and our exposure to poor air quality, we reduce the likelihood of poor health and damage to the environment. We should limit the sources of air pollution and our exposure where we work, travel, live, play or study, especially for the most vulnerable. How can we reduce the sources of air pollution and our exposure?
- 5. Empowering Behaviour Change: To encourage and support individual behaviour change to improve air quality by embedding into our culture (businesses, organisations, local communities, the council etc) the policies, guidance and capability to be less polluting. How can you and/or your organisation empower an individual to pollute less?

<sup>&</sup>lt;sup>11</sup> These Priorities link with the Urban Transport Group – <u>Air Quality City Regions Transport Toolkit (2014)</u> of Reduce, Shift and Improve which has been incorporated into the Draft West Midlands Air Quality Action Plan.

<sup>&</sup>lt;sup>12</sup> Fleet – all the vehicles that are traveling on our roads (buses, cars, HGVs etc).

### 3 - PLEDGES

The following pledges are designed to put the priorities into action in a number of targeted ways. The format of these pledges follows the structure of:

**Description** – What the pledge is about?

**Priorities** – What priorities can it fulfil?

Lead – Who owns the pledge and champions its action?

**Support** – How others can be involved to support the Pledge?

**Communicate** – How will the actions of the pledge be communicated?

**Collaborate** – Who are the key stakeholders that will be involved?

**How can you support this pledge?** - How can others contribute to making the pledge a reality?

There are currently Six Pledges which have been made by Birmingham City Council through the Brum Breathes Programme. It is hoped that other organisations will make their own pledges to improve the quality of the air we breathe every day.

By using the priorities, and the structure above, how can you champion change?

You can share your pledges through social media by using the #BrumBreathes hashtag.

## Pledge 1 Collaboration

The support of many is required to deliver the change needed to improve air quality. No single organisation can carry the burden alone. We need to work together to change the city for the benefit of all. For example, the Council can install cycle lanes, but if they have limited use, they do not meet their potential. Businesses can be supported to encourage employees to use cycling as a real alternative. This can also be backed up by strategic policies and the implementation of the regional on street bike hire scheme and E-Scooters. Projects like this can only be successful by collaboration and listening to each other. A few of the key partner organisations are listed below.

- WM-Air the West Midlands Air Quality Improvement Programme: a joint initiative
  led by the University of Birmingham comprising a range of regional stakeholders (Inc.
  Birmingham City Council). WM-Air seeks to improved understanding of pollution
  sources and levels of exposure. This can facilitate provided capability to predict air
  quality, health and economic impacts. It will support the application to specific case
  studies across the West Midlands, ranging from major infrastructure projects such as
  HS2 through to more locally based schemes e.g. Low Traffic Neighbourhoods (LTN)
  <a href="https://wm-air.org.uk/">https://wm-air.org.uk/</a>
- The Rail Safety Standards Board (RSSB) are responsible for the rail network and have made efforts to reduce air pollution at train stations and rolling stock, guided by their Air Quality Strategic Framework<sup>13</sup> With Birmingham being a national Rail Hub the city is likely to benefit from a number of national schemes. <a href="https://www.rssb.co.uk/en/research-and-technology/sustainability/Air-quality">https://www.rssb.co.uk/en/research-and-technology/sustainability/Air-quality</a>
- Highways England are responsible for Motorways & Major A-Roads, and have a duty to help reduce air pollution. There are four motorways in the Birmingham area, along with the Spaghetti Junction, one of the largest road traffic interchanges in Europe. <a href="https://highwaysengland.co.uk/our-work/air-quality/">https://highwaysengland.co.uk/our-work/air-quality/</a>
- Transport for West Midlands (TfWM) <a href="https://www.tfwm.org.uk/">https://www.tfwm.org.uk/</a> is the transport arm of the West Midlands Combined Authority <a href="https://www.wmca.org.uk/">https://www.wmca.org.uk/</a>. TfWM is responsible for the public transport network across the West Midlands area, and provides insight into travel behaviours <a href="https://www.tfwm.org.uk/strategy/data-insight/">https://www.tfwm.org.uk/strategy/data-insight/</a>

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<sup>&</sup>lt;sup>13</sup> https://www.rssb.co.uk/en/research-and-technology/sustainability/Air-quality

### **Priorities** – ALL (Graphic)

**Lead** – For Birmingham, The Brum Breathes Programme run by Birmingham City Council will lead the way to share, promote and provide ideas and resources. <a href="www.BrumBreathes.co.uk">www.BrumBreathes.co.uk</a>

**Support** –Regional Policy such as the West Midlands Regional Action Plan (Draft) can support our Birmingham air quality policy and guidance, whilst partnership projects such as WM-Air can demonstrate the effectiveness of collaborative working. It can also filter down into many aspects of local policy as shown in this Clean Air Strategy.

**Communicate** – if we do not discuss with each other what the solutions are and the barriers we face as a collective we will fail to deliver the change required. Brum Breathes will provide a platform to disseminate news, information, ideas, events, tools and help with funding. However, communication is a two-way process and we need to hear from you on what you have done to encourage change, the barriers you face and how we can work together.

**Collaborate** – This is the heart of this pledge; we all need to work together to deliver a world future generations can be proud of. We will collaborate with national, regional and local organisations to maximise the opportunities to change for the better.

### How can you support this pledge?

Visit the <a href="www.BrumBreathes.co.uk">www.BrumBreathes.co.uk</a> and see what support is available to you to make a change for the better. If you have any ideas on how air quality can be improved, please let us know via <a href="www.Birminghambeheard.org.uk/Action">www.Birminghambeheard.org.uk/Action</a> on Air Quality

## Pledge 2 Clean Air for Schools

The next generation deserve the best start in life we can provide. There is clear evidence that children in areas of high air pollution are four times more likely to have reduced lung function when they reach adulthood. Journeys to school by car can cause a spike in local congestion, and increase air pollution at the school gates, exposing children to poor air quality.

#### **Priorities** – ALL (Graphic)

**Lead** – School streets are places where we put children and families first and keep them safe and healthy by encouraging walking, scooting and cycling to school. Encouraging active travel to school helps reduce the number of cars on the roads – and is the best way to make the air cleaner for everyone. The Brum Breathes Programme already works with a number of schools through Modeshift STARs (the national award scheme supporting schools to create a travel plan promoting safer, greener healthier travel). The scheme has seen the development of a range of campaign resources designed to support cleaner air including:

- Switch Off School Streets A toolkit with resources to help schools to run an 'antiidling' campaign.
- Car Free School Streets Roads outside schools are closed to traffic at the start and end of the school day, helping to reduce congestion and improve air quality at the school gates.
- Clean Air Cops An educational resource to teach children, and their families about air pollution, its causes and impacts and how it can be reduced.
- Air Quality Monitoring Programme for Schools.

We plan to build on this foundation to promote the benefits of better air quality.

**Support** – Championing the change will be fostered within the school culture, from teachers, students, pupils and parents; they all have a part to play. Taking ownership of the local issues and identifying where change needs to occur works best from the ground upwards.

**Communicate** – a clear consistent message backed up with easily accessible resources will be made available. To ensure the local voice is heard, each school will be encouraged to collect and share ideas with the wider group. We have already made a start and encourage all schools to join us!

- Mode Shift Stars: https://www.birmingham.gov.uk/modeshiftstars
- Switch off School Streets:
   <a href="https://www.birmingham.gov.uk/switchoffschoolstreets">https://www.birmingham.gov.uk/switchoffschoolstreets</a>
- Clean Air Cops
   https://www.birmingham.gov.uk/info/20163/safer greener healthie
   r travel/1852/safer greener healthier school travel/4

**Collaboration** is key to this pledge - parents, teachers, pupils, the council and the local community - We will all need to work together to ensure we can provide clean air for our schools.

How can you support this pledge? The good news is that small changes can make a big difference — and we can all play our part. That is why we are calling on all schools in Birmingham to take action by joining us on the journey to cleaner air. If you go to school, teach at school, or are a parent/guardian, see what you can do to support and encourage an improvement in air quality and sustainable travel. Your actions really can change the air that people breathe.

## Pledge 3 Inclusivity & Protecting the Vulnerable

Poor air quality can significantly impact the most vulnerable amongst us. Road traffic is the primary cause of air pollution. A heavily congested road often blights the local area. In deprived areas the issue is further compounded due to the prevalence of other health and wellbeing factors associated with deprivation. Care Homes, shelters and hospitals home some of the most vulnerable members in our community. These facilities should be given priority to ensure that poor air quality does not contribute to poor health of the residents.

It is important to ensure that the needs of all are considered when implementing change and that no one group is significantly disadvantaged. Furthermore, by improving one area there is a concern that the problem may simply move to another area and increase health inequalities. The priorities outlined in section 2 of this strategy are designed to help reduce this potential risk, with the aim of providing a net benefit for all.

It is important that everyone can engage, understand and support the changes to improve air quality across the city. All efforts will be made to engage with the wide variety of communities across the city to share information, views and ideas on how to improve air quality. This is particularly important in areas of high deprivation where improvements will have the greatest impact.

### **Priorities** – All (Graphic)

**Lead** – Birmingham City Council will identify areas of high air pollution that may be the cause of compounding existing health and wellbeing issues. By championing the voice of the most vulnerable and ensuring that change does not disadvantage one group over another an overall air quality benefit will be achieved

**Support** – by Public Health England, Birmingham Public Health and similar organisations that have strong connections with these groups.

**Communicate** – the location of air pollution hotspots and the need for change will be communicated internally within the council, and externally to stakeholders and the wider community.

**Collaborate** – with others to ensure the benefits and opportunities for change are maximized to their full potential.

### How can you support this Pledge?

Visit the <u>www.BrumBreathes.co.uk</u> and see what support is there for you to make a change for the better.

### Pledge 4 Planning for the Future

In the 1960s the city prioritised the car, and now we live with the consequences of road traffic emissions polluting our air, resulting in damage to our health and the environment. In 21<sup>st</sup> Century Birmingham our priorities have clearly changed. We need to combat air pollution, reduce carbon emissions and adapt to climate change. To do this we will continue to deliver a world class transport system that will prioritise walking, cycling and public transport instead of the car. Future developments will need to be designed to complement sustainable travel and minimise pollution. Road traffic emissions are the main contributor to poor air quality, however other sources of air pollution should not be forgotten, such as wood burners which contribute significant volumes of PM2.5.

By 2031 the city is projected to grow by an additional 15,000 people resulting in 1.2 million additional daily trips across the network. It is not possible or indeed desirable to accommodate all of these by private car.

#### **Priorities** – All (Graphic)

**Lead** - The fabric of our city is made of buildings and roads; Birmingham City Council is best placed to lead the way in implementing planning and highway strategies, guidance and policy that prioritises human health and the environment.

**Planning:** The Birmingham Development Plan (BDP) 2031<sup>14</sup> sets out the spatial vision and strategy for the sustainable growth of Birmingham with the objective of providing an enterprising, innovative and greener city.

The local plan provides a strong commitment to ensuring new development supports the delivery of vibrant and healthy living and working environments. There is also an appreciation to limit exposure to areas of high pollution and to avoid generating new pockets of poor air quality. The recently drafted Birmingham Parking Supplementary Planning Document that sets out a new approach to parking space allocations in the new developments<sup>15</sup> supports this aim.

The emerging Development Management in Birmingham (DMB) (2019)<sup>16</sup> provides detailed development management policies. Section 2: Environment sets policies which seek to ensure new developments over their lifetime contribute towards improvements in the quality of life in Birmingham. DM1: Air Quality – sets out the councils proposed policies to improve air quality by taking a proactive approach to planning, regeneration and new

 $<sup>^{14}\</sup> https://www.birmingham.gov.uk/downloads/file/5433/adopted\_birmingham\_development\_plan\_2031$ 

https://www.birmingham.gov.uk/info/20109/parking/2045/draft birmingham parking supplementary planning docume nt consultation

https://www.birmingham.gov.uk/info/20054/planning strategies and policies/1861/development management in birm ingham submission

development, ensuring air quality is considered during the planning process and appropriate mitigation is implemented.

**Transport:** Birmingham Transport Plan 2031<sup>17</sup> - The **four big moves** in the strategy encapsulate the change in decision making that this Clean Air Strategy supports. N.B. due to COVID-19 Birmingham City Council has instigated a Draft Emergency Transport Plan<sup>18</sup> that will fast track some of the proposed measures

https://covidmeasuresbirmingham.commonplace.is/overview

**Reallocating Road Space** - The allocation of road space will shift from single occupancy private cars to support the delivery of a public transport system fit for a global city, fundamentally changing the way that people and goods move around the city.

**Transforming the City Centre** - The city centre of Birmingham will be transformed through the creation of a network of pedestrian-only streets and public spaces integrated with public transport services and cycling infrastructure. Access to the city centre for private cars will be limited with no through trips. This includes looking at different options for the central section of the A38 including re-routing it to an upgraded ring road.

**Prioritising Active Travel in Local Neighbourhoods** - Active Travel (walking and cycling) will become how most people get around their locality most of the time. Cars will no longer dominate street life around home and schools. A limit of 20mph will be standard on all roads. Residential neighbourhoods and local centres will be places where people are put first. This is further supported by Birmingham Walking and Cycling Strategy<sup>19</sup> that is aimed to raise levels of cycling to 5% of all trips by 2023 and 10% of all trips by 2033

Managing Demands through Parking Measures - Parking will be used as a means to manage demand for travel by car through availability, pricing and restrictions. Where development potentially exists, land currently occupied by car parking will be put to a more productive use.

Alongside the physical changes policies, funding and guidance will continue to be developed to support the charging network for electric vehicles, on streetcar hire (car clubs) and access to cycling such as on street bike hire etc.

**Support** – we will work with developers, businesses, organisations, communities and the public to embrace the changes the city is to undertake and encourage a new approach to the way we travel around the city.

**Communicating** - a common vision for the city is key to ensure we all aim in the same direction.

<sup>17</sup> https://www.birmingham.gov.uk/info/20013/roads\_travel\_and\_parking/2032/draft\_birmingham\_transport\_plan

<sup>&</sup>lt;sup>18</sup> https://www.birmingham.gov.uk/emergencytransportplan

<sup>&</sup>lt;sup>19</sup> https://www.birmingham.gov.uk/info/20013/roads travel and parking/1942/walking and cycling strategy and infrastructure plan

**Collaboration** between Council departments, developers, businesses, organisations and the wider community can foster a greater understanding of the issues around air quality and help generate and implement innovative solutions.

### How can you support this pledge?

You can help by considering how you travel and if you really need to – even one or two changes a week can add up to a significant difference across the network. Businesses and schools can support this pledge by implementing travel plans, for example joining the Mode Shift Stars scheme <a href="https://www.modeshiftstars.org/">https://www.modeshiftstars.org/</a>

## Pledge 5 – Clean Air Zone (CAZ) for Birmingham's City Centre

A Clean Air Zone (CAZ) is a method of incentivising a change to less polluting forms of travel. Due to the excessive level of Nitrogen Dioxide a Clean Air Zone has been implemented for Birmingham City Centre contained within the inner ring road<sup>20</sup>. The CAZ charges the most polluting types of vehicle and provide financial support to citizens to encourage modal shift to less polluting vehicles and alternative modes of travel (bus, train, metro, cycle, walk) or to upgrade their private vehicle to one that is less polluting. For more information please see www.brumbreathes.co.uk

Class D Clean Air Zone – which means if your vehicle (including private cars) produces too much pollution it will be charged. To see if your vehicle complies with the Clean Air Zone there is a free online tool - https://www.gov.uk/check-clean-air-zone-charge

**Priorities** – All (Graphic)

**Lead** – Birmingham City Council will take the lead in implementing the Clean Air Zone.

**Support** – It is understood the Clean Air Zone will have a financial impact on citizens and businesses. To help with the transition there are several incentives including financial support that will smooth the transition to a low polluting fleet of vehicles. Revenue generated by the CAZ will be reinvested into the other pledges in this Strategy, and reported upon via www.brumbreathes.co.uk

**Communicate** – every step of the way the Clean Air Zone (CAZ) has been discussed through public consultations and supporting evidence<sup>21</sup>. Regular updates will be provided through the <a href="https://www.brumbreathes.co.uk">www.brumbreathes.co.uk</a> website, social media and signage.

### How can you Support this Pledge?

We would like to see businesses and citizens consider their future journeys in the light of whether they are necessary or whether they can be undertaken by a different route or mode. The CAZ is not only about charging the most polluting vehicles, it about supporting a change to a less polluting world. You may qualify for support, please see <a href="https://www.brumbreathes.co.uk">www.brumbreathes.co.uk</a>

<sup>&</sup>lt;sup>20</sup> <u>https://maps.birmingham.gov.uk/webapps/brum/mybrummap/</u> [Layers – Transportation]

<sup>&</sup>lt;sup>21</sup> https://www.birmingham.gov.uk/info/20076/pollution/1763/a clean air zone for birmingham/5

## Pledge 6 – Measuring Progress

Without measuring the air pollution, we will have no way of telling if things are improving. Fortunately, for many years the City Council has collected a wealth of air quality data. Continued effort will be made to maintain and expand our monitoring network implementing new technologies as they become available.

Data will be shared in a format that is accessible, interactive and understandable. But air quality data is only one aspect, the growth of electric charging points, the use of public transport, the implementation of cycle routes are all indicators that can be quantified to demonstrate how our city is changing for the better. A number of useful links are provided at the end of this strategy, including:

- www.Birminghamairquality.co.uk : Birmingham City Councils Air Quality Data
- https://wm-air.org.uk : WM Air

**Priorities** – without a solid understanding of the problem it is impossible to determine if our actions are working for the betterment of air quality. This will be the primary benchmark to show an improvement.

**Leading** – Birmingham City Council will continue to maintain, expand and adapt the monitoring network to ensure it stays relevant to the ever-changing cityscape.

**Supported** by others who have an interest in monitoring air quality, such as Birmingham University. We will also work through citizen science projects to encourage a wider understanding of how air pollution is monitored and what it means.

**Communicating** clear, reliable, easily accessible, understandable data is key to this pledge and we will support and encourage the sharing of consistent reliable data.

**Collaboration** will be key to ensure that duplication of efforts and misinformation is avoided. This can only be achieved in collaboration with multiple stakeholders to ensure an accurate picture of our air quality is provided that can be understood by all.

### How can you support this pledge?

By being aware of the resources available and seeing the progress for yourself. Only by looking back on where we were to where we are going can we demonstrate the change for better.

### **Useful Links**

- Clean Air Zone <u>www.BrumBreathes.co.uk</u>
- Birmingham City Council Air Quality Data <u>www.BirminghamAirQuality.co.uk</u> / <u>www.BirminghamAirPollution.co.uk</u>
- Birmingham City Council Air Quality Pages https://www.birmingham.gov.uk/info/20076/pollution/1276/air\_pollution
- Transport for West Midlands Insight Team <a href="https://www.tfwm.org.uk/strategy/data-insight/">https://www.tfwm.org.uk/strategy/data-insight/</a>
- WM-Air <a href="https://wm-air.org.uk">https://wm-air.org.uk</a>
- Birmingham Urban Observatory <a href="https://birminghamurbanobservatory.com/">https://birminghamurbanobservatory.com/</a>
- Rail Safety and Standards Board (Railway network air quality)
   <a href="https://www.rssb.co.uk/en/research-and-technology/sustainability/Air-quality">https://www.rssb.co.uk/en/research-and-technology/sustainability/Air-quality</a>
- Highways England <a href="https://highwaysengland.co.uk/our-work/air-quality/">https://highwaysengland.co.uk/our-work/air-quality/</a>
- Sustrans https://www.sustrans.org.uk/
- Emergency Travel Plans https://covidmeasuresbirmingham.commonplace.is/overview